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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,267	11/17/2003	Finis Conner	021206-000710US	6476

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EXAMINER


WALSH, DANIEL I

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/716,267	CONNER ET AL.	
	Examiner	Art Unit	
	Daniel I Walsh	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 11-14, 17 and 18 is/are rejected.
- 7) ☒ Claim(s) 8-10, 15 and 16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 1 and 17-18 are objected to because of the following informalities: Re claims 1, 17, and 18: Replace "5" "8" and "10", with -- 5:1 --, -- 8:1 --, and -- 10:1 -- respectively. A ratio should be expressed as a relationship between two numbers. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1, 2, 6, 7, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Opheij et al. (US 4,868,373).

Opheij et al. teaches a card with a storage medium to store data (3), an integrated circuit device including security information (2,20 that include security information (PIN)), both the storage and IC provided within the card (FIG. 1B), wherein the security information stored in the IC is used to authenticate an access request to the storage medium. It is understood that the PIN is used to authenticate an access request to the storage medium. Further, the Examiner notes such means are well known and conventional (see US 6,776,346 and US 6,578,768 which teaches PIN/code/data requirements for accessing the memory).

Re claim 2, Opheij et al. teaches a reader to access the storage medium, the reader including a first interface to interface with the IC and the second interface to interface with the storage medium (abstract).

Re claim 6, it is well known that the optical means is a non-volatile semiconductor device (silicon). Further, Opheij et al. teaches the optical memory can be replaced with magnetic memory (stripe) as is well known in the art.

Re claim 7, it is well known and conventional for flash memory to be used in a smart card. Therefore, the use of flash memory is an obvious matter of design variation, based on the type of reader system being employed, costs, environment, amount of data to be stored, etc.

Re claims 1, and 17-18, though the prior art is silent to the dimensions of the card, the Examiner notes that one of ordinary skill in the art would have been motivated to use such a ratio, as to comply with ISO standards for IC/transaction cards/provide a card that is small/portable to be easily carried in a wallet, pocket, hand, etc.

3. Claims 1, 6-7, and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sonzogni et al. (US 6,776,346).

Sonzogni et al. teaches a card with a width, length, and thickness, a storage medium to store data (220), an IC device including security information (R), wherein the storage medium and the IC are provided within the card and the security information stored in the IC is used to authenticate an access request to the storage medium.

Re claims 6-7, though Sonzogni et al. is silent to flash/nonvolatile semiconductor memory, the Examiner notes it is well known and conventional in the art to use such memory for storage in smart/IC cards based on design considerations, storage, costs, etc.

Re claims 1, and 17-18, though the prior art is silent to the dimensions of the card, the Examiner notes that one of ordinary skill in the art would have been motivated to use such a ratio, as to comply with ISO standards for IC/transaction cards/provide a card that is small/portable to be easily carried in a wallet, pocket, hand, etc.

4. Claims 3, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Opheij et al. in view of Gray et al. (US 2001/0000405).

The teachings of Opheij et al. have been discussed above.

Opheij et al. is silent to encryption/decryption.

Re claim 3, the Examiner notes that it is well known and conventional in the art for a reader to have a processor for controlling access to the card/memory. Such means are well known and conventional in the art, and are interpreted as a security module, as data off the card such as personal access numbers, passwords, PINs, etc. are used to authenticate the access request (see US 6,669,100 as one of many examples, which teaches a reader with a processor to authenticate an authorization request, interpreted as a security module).

Re claim 4, Gray et al. teaches ROM (42a) which includes firmware for encryption/decryption. Though Gray et al. is silent to a second processor, Gray et al. teaches firmware, and single processor 40. At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to use a second processor, as a means to reduce the load on processor 40, for example, and thus would produce expected results. The Examiner notes that specialized coprocessors/processors to perform tasks in a reader are well known and conventional in the art. Therefore, such modification is an obvious expedient.

Re claim 5, Gray et al. teaches a random number generator and a random access memory (42a and 42b).

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Opheij et al. with those of Gray et al.

One would have been motivated to do this to add additional security to the reader system.

5. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Opheij et al. in view of Binder et al. (US 6,578,768).

The teachings of Opheij et al. have been discussed above.

Opheij et al. is silent to a cryptography module in the IC.

Binder et al. teaches the IC includes a memory 220, a security information storage area for storing the security information (cryptography key) and a cryptography module (FIG. 3), where coprocessor 270 is seen as a cryptography module that executes cryptographic functions.

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Opheij et al. with those of Binder et al.

One would have been motivated to do this for data security of the card.

6. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sonzogni et al. in view of Binder et al.

The teachings of Sonzogni et al. have been discussed above.

Sonzogni et al. is silent to a cryptography module in the IC.

Binder et al. teaches the IC includes a memory 220, a security information storage area for storing the security information (cryptography key) and a cryptography module (FIG. 3), where coprocessor 270 is seen as a cryptography module that executes cryptographic functions.

At the time the invention was made, it would have been obvious to an artisan of ordinary skill in the art to combine the teachings of Sonzogni et al. with those of Binder et al.

One would have been motivated to do this for data security of the card.

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Opheij et al./Binder et al., further in view of Mawatari (US 2004/0195312).

The teachings of Opheij et al./Binder et al. have been discussed above.

Opheij et al./Binder et al. are silent to a secure and unsecure memory.

Mawatari teaches the memory of an IC card is divided into a public and private area, interpreted as secure/unsecure area, for handling data from different sources/applications (abstract and paragraph [0053]).

At the time the invention was made, it would have been obvious to combine the teachings of Opheij et al./Binder et al. with those of Mawatari.

One would have been motivated to do this to have a memory (of an IC card) that can store data for multiple applications

8. Claims 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sonzogni et al. /Binder et al., further in view of Mawatari.

The teachings of Sonzogni et al./Binder et al. have been discussed above.

Sonzogni et al./Binder et al. are silent to a secure and unsecure memory.

Mawatari teaches the memory of an IC card is divided into a public and private area, interpreted as secure/unsecure area, for handling data from different sources/applications (abstract and paragraph [0053]+).

At the time the invention was made, it would have been obvious to combine the teachings of Sonzogni et al./Binder et al. with those of Mawatari.

One would have been motivated to do this to have a memory (of an IC card) that can store data for multiple applications

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Opheij et al. in view of Dilday et al. (US 6,484,940).

The teachings of Opheij et al. have been discussed above.

Opheij is silent to a pin/cover means for the disk that moves in two directions.

Dilday et al. teaches a cover for moving in two directions (sheath 144). Though not a pin, the sheath is used to protect and expose the disk medium for handling and reading operations. Accordingly, it would have been an obvious matter of design variation to have a movable pin, as opposed to a movable sheath, as an alternative means to protect and provide access to a disk storage member. Moving the sheath by a pin/handle as opposed to an inset is well within the skill in the art, as an alternative means to actuate the covering.

Allowable Subject Matter

10. Claims 8-10, 15, and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach that the IC is provided directly over the flash memory and that a pin moves along a first direction when the card is inserted into the reader to provide an opening to the disk.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Tsai et al. (US 6,789,738), Saito et al. (US 2004/0129787), Boettiger (US 2004/0118913), Cheung (US 2003/0111539), Lynch (US 2003/0155425), Gauthier (US 6,297,789), Takahashi et al. (US 6,552,869), and Ong et al. (US 6,550,678).

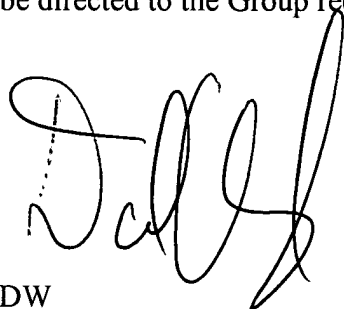
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Walsh whose telephone number is (571) 272-2409. The examiner can normally be reached between the hours of 7:30am to 4:00pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone numbers for this Group is (703) 872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to **[daniel.walsh@uspto.gov]**.

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set for the in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



DW
12/21/04



KARL D. FRECH
PRIMARY EXAMINER